

MEMO

TO: Maryland Department of the Environment and U.S. Army Corps of Engineers
Regulatory Review Staff

FROM: Serena McClain, American Rivers

DATE: January 9, 2015

RE: Bloede Dam Removal Sediment Management Workshop and Assessment

American Rivers, Maryland Department of Natural Resources, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service and other project partners (the project team) take the removal of the Bloede Dam and analysis of any short- and long-term impacts seriously when evaluating the most appropriate method for removing the dam structure and managing sediment within the dam's impoundment. Once additional borings and sediment cores established the volume of sand and gravel impounded behind Bloede Dam, as well as the presence of a pocket of finer sediment containing phosphorus, the project team elected to consult a broad array of sediment and nutrient experts across the Chesapeake Bay to better inform us and, in light of the technical data, to provide their sediment management recommendations. This consultation occurred on January 15, 2014, in the form of a sediment management workshop. What follows is a summary of said workshop. Detailed notes and a video of the proceeding are available upon request.

Bloede Dam Removal Sediment Management Workshop Summary

Workshop attendees:

Serena McClain, American Rivers, River Restoration
Laura Craig, American Rivers, Science and Economics
Jessie Thomas-Blate, American Rivers, River Restoration
Stacey Detwiler, American Rivers, Clean Water
Mary Andrews, NOAA
Matt Collins, NOAA
Jim Thompson, Maryland Department of Natural Resources, Fisheries
Nancy Butowski, Maryland Department of Natural Resources, Fisheries
Rich Ortt, Maryland Department of Natural Resources, Maryland Geological Survey
Sarah Lane, Maryland Department of Natural Resources, Restoration Finance and Policy
Scott Stranko, Maryland Department of Natural Resources, Maryland Biological Stream Survey
Michele Hurt, Maryland Department of Natural Resources, Engineering & Construction
Mostafa Izadi, Maryland Department of General Services, Project Management Team
Allen Gellis, USGS
Jon Dillow, USGS
Jeff Cornwell, UMCES
Walter Boynton, UMCES
Peter Wilcock, Johns Hopkins University

Matt Baker, University of Maryland Baltimore County
Rich Starr, U.S. Fish and Wildlife Service
Julie Devers, U.S. Fish and Wildlife Service
Bill Seiger, Maryland Department of the Environment
Doug Myers, Chesapeake Bay Foundation
Mark Bryer, The Nature Conservancy
Scott Lowe, McCormick Taylor
Graham Boardman, McCormick Taylor
Jonathon Kusa, Interfluve
Bill Norris, Interfluve

The first half of the workshop focused on presenting the group with an overview of the HEC-RAS model results, sediment analysis and geotechnical investigation (Bloede Dam Removal 60% Design Report, pages 5-6, 9-16) conducted at the dam site, as well as an analysis of biological and geomorphic monitoring data collected for the Patapsco River since the Simkins Dam removal in October 2010 (see Tab 9). This was followed by a lengthy discussion of the sediment management options at the Bloede Dam site, focusing largely on removal and excavation of the sediment in question, stabilization of material in place or the mobilization and passive release of the material. Group discussion on sediment management tactics focused largely on (1) timing of the mobilization and (2) the potential for ecological risk.

Group Recommendation:

Overall, the group agreed that passive sediment management was the appropriate approach in the removal of Bloede Dam.

Several follow-up items were identified during the meeting and are included in this permit submittal. This includes a scientific memo from Walter Boynton and Jeff Cornwell from UMCES with a biogeochemical impact assessment of Bloede Dam removal, an updated DREAM sediment transport model and an assessment of the potential for downstream flood impacts using HEC-RAS.